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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/023,512 | 12/18/2001 | Jamal Seyed-Yagoobi | W-W Case 51 | 4597 |

7590 08/24/2004

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EXAMINER

LEO, LEONARD R

ART UNIT PAPER NUMBER

3753

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

10/023,512

Applicant(s)

SEYED-YAGOOBI ET AL.

Examiner

Leonard R. Leo

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 19 July 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: 23 and 46.Claim(s) rejected: 1,3,13,14,17,18,24-26,36,37,40,41,47 and 48.Claim(s) withdrawn from consideration: 4-10,12,19-22,27-33,35,42-45 and 49.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

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Upon filing an Appeal Brief, the amendment filed on July 19, 2004 will be entered. The following grounds of rejection will apply.

Claims 11, 15-16, 34 and 38-39 are cancelled, 1-10, 12-14, 17-33, 35-37 and 40-49 are pending, and claims 4-10, 12, 19-22, 27-33, 35, 42-45 and 49 remain withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 48 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim recites "at least one" heat transfer member in line 2 and "plural" heat transfer members in lines 8-9. The claim is indefinite when only "one" heat transfer member is read.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 13-14, 17-18, 24-26, 36-37, 40-41 and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seyed-Yagoobi et al in view of Itoh et al.

Seyed-Yagoobi et al discloses all the claimed limitations except surface alterations, and plural groups of electrical conductors.

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Itoh et al discloses an EHD pumping device comprising an AC voltage source 9 and a cylindrical transfer member 4 (column 5, line 64 to column 6, line 8) with electrical conductor 1 disposed in a recess and coplanar to the transfer member outer surface (Figure 8) for the purpose of minimizing obstruction with the motive particles along the transfer member surface.

Knight discloses an EHD pumping device comprising an AC voltage source 24 and a cylindrical transfer member 12 and a plurality of electrical conductors 40 disposed in plural groups 36 spaced along the transfer member for the purpose of providing pulsatile flow.

Since Seyed-Yagoobi et al and Itoh et al are both from the same field of endeavor and/or analogous art, the purpose disclosed by Itoh et al would have been recognized in the pertinent art of Seyed-Yagoobi et al.

Since Seyed-Yagoobi et al and Knight are both from the same field of endeavor and/or analogous art, the purpose disclosed by Knight would have been recognized in the pertinent art of Seyed-Yagoobi et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Seyed-Yagoobi et al the electrical conductor disposed in a recess and coplanar to the transfer member outer surface for the purpose of minimizing obstruction with the motive particles along the transfer member surface as recognized by Itoh et al, and employ in Seyed-Yagoobi et al plural groups of electrical conductors spaced along the transfer member for the purpose of providing pulsatile flow as recognized by Knight.

Regarding claims 13-14, Itoh et al discloses the electrical conductor (i.e. insulated in Seyed-Yagoobi et al) may be any shape, i.e. rectangle or square (column 6, lines 26-30). In the

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combination, the insulated electrical conductor would be recessed and coplanar with the outer surface of the transfer member.

Regarding claim 24, Figure 1 of Seyed-Yagoobi et al discloses plural heat transfer members 18.

Regarding claims 36-37, the claims are rejected as applied to claims 13-14 above.

Regarding claims 47 and 48, the claims are met by the combination of references, since the scope is broader than claims 1 and 24, respectively.

Allowable Subject Matter

Claims 23 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The reply filed on July 19, 2004 is not fully responsive to the prior Office action because of the following omission(s) or matter(s):

The amendment does not comply with the requirements of 37 CFR 1.121(c) because the amendment does not list the correct status of all the claims. Claims 4-10, 12, 19-22, 27-33, 35, 42-45 and 49 should be denoted as "withdrawn."

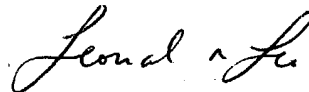
Furthermore, the previous Office action requested all publications, not of record in this application, associated with the commonly invented U.S. Patent No. 6,409,975. Applicants must acknowledge this request or future communications will be considered nonresponsive.

Applicants' silence with respect to this second request is not well taken. See MPEP 2000 for further guidance.

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Any inquiry of a general nature, relating to the status of this application or clerical nature (i.e. missing or incomplete references, missing or incomplete Office actions or forms) should be directed to the Technology Center 3700 Customer Service whose telephone number is (703) 306-5648. Status of the application may also be obtained from the Internet: <http://pair.uspto.gov/cgi-bin/final/home.pl>

Any inquiry concerning this Office action should be directed to Leonard R. Leo whose telephone number is (703) 308-2611.



LEONARD R. LEO
PRIMARY EXAMINER
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August 16, 2004